

17 ATTACHMENT 10 - COSTS AND BENEFITS SUMMARY

Table 17-1: Proposal Project Costs and Benefits Summary (Table 20)

Table 20 - Proposal Project Costs and Benefits Summary Proposal: <u>2011 Groundwater Recharge, Waste Water Reuse, Habitat Restoration</u> <u>and Water Quality Protection Projects Proposal</u> Agency: <u>Kaweah Delta Water Conservation District</u>							
Project	Agency	Total Present Value Project Costs (1)	Total Present Value Project Benefits				B/C Ratio
			Water Supply (2)	Flood Damage Reduction (3)	Other (4)	Total	
(a)	(b)	(c)	(d)	(e)	(f)	(g) (d) + (e) + (f)	(h) (g) / (c)
Plum Basin Project	Tulare ID and City of Tulare	\$3,387,713	\$3,900,188	\$0	\$0	\$3,900,188	1.2
Water Reuse Pipeline Project	Tulare ID and City of Visalia	\$14,734,570	\$23,002,704	\$0	\$0	\$23,002,704	1.6
Paregien Basin Project	Kaweah Delta WCD	\$1,619,861	\$936,072	\$3,055,318	\$0	\$3,991,390	2.5
Oakes Habitat Enhancement Project	Kaweah Delta WCD and City of Visalia	\$140,375	\$0	\$0	\$277,074	\$277,074	2.0
Groundwater Quality Protection & Investigation Project	Tulare County	\$466,484	\$0	\$0	\$618,378	\$618,378	1.3
TOTAL		\$20,349,003	\$27,838,964	\$3,055,318	\$895,452	\$31,789,734	1.6

(1) From Exhibit C, Table 11, column (i). Or from Exhibit #, Table 17, column (i). If project is a multi-purpose project, avoid double-counting costs.

(2) From Exhibit C, Table 15, column (d)

(3) From Exhibit E, Table 19, row (e)

(4) From Exhibit D, Table 16, column (j)

17.1 Plum Basin Project

Over the projected life of the project of 50 years, Plum Basin is expected to cost \$3,258,559 when discounted to 2009 dollars. Quantifiable benefits for this project are categorized as water supply benefits and are expected to generate \$3,900,188 in 2009 dollars. Comparing these costs and benefits, the benefits outweigh the costs by a factor of 1.2.

17.2 Water Reuse Pipeline Project

Over the projected life of the project of 40 years, the Water Reuse Pipeline project is expected to cost \$14,734,570 when discounted to 2009 dollars. Quantifiable benefits for this project are categorized as water supply benefits and are expected to generate \$23,002,704 in 2009 dollars. Comparing these costs and benefits, the benefits outweigh the costs by a factor of 1.6.

17.3 Paregien Basin Project

Over the projected life of the project of 50 years, the Paregien Basin project is expected to cost \$1,619,861 when discounted to 2009 dollars. Quantifiable benefits for this project are categorized as water supply and flood damage reduction benefits and are expected to generate \$936,072 and \$3,055,318 respectively in 2009 dollars. Comparing these costs and benefits, the benefits outweigh the costs by a factor of 2.5.

17.4 Oakes Basin Habitat Enhancement Project

Over the projected life of the project of 50 years, the Oakes Basin Habitat Enhancement project is expected to cost \$140,375 when discounted to 2009 dollars. Being a habitat enhancement project, the benefits the project provides cannot be justified with a dollar value, resulting in benefit to cost ratio of 0. However, while not cost effective this project still contributes to the overall goals of the IRWM group.

17.5 Groundwater Quality Protection and Investigation

Over the projected life of the project, the Groundwater Quality Protection and Investigation project is expected to cost \$466,484 when discounted to 2009 dollars. This project will provide quantifiable benefits to the Disadvantaged Communities as an avoided water supply project which would have cost \$618,378 in 2009 dollars. Comparing these costs and benefits, the benefits outweigh the costs by a factor of 1.6.